## Chapter 6

# **Forklifts**

Forklifts are effective over unprepared or unstabilized surfaces. They work well in rough terrain where high-flotation tires are necessary. Most forklifts are four-wheel-steering machines. The Army uses forklifts for loading, unloading, and transporting crates and palletized loads. Examples of such situations would be over a beach; in a surf; and in deep sand, snow, or mud. Without a load, a forklift can move at high speeds between construction sites.

## **USE**

6-1. Forklifts *(Figure 6-1)* were once restricted to use in warehouses or terminals. The Army now uses them for various activities, including—

- Loading and unloading flatcars, trucks, flat trailers, aircraft, and naval landing craft.
- Stocking and transporting heavy crates and palletized loads.

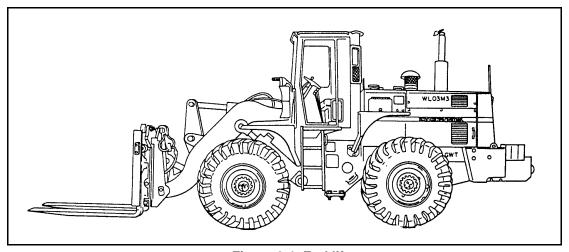


Figure 6-1. Forklift

# **OPERATION TECHNIQUES**

### POSITIONING TO LOAD

6-2. When positioning a forklift to pick up a load, bring it in square to the load. Then use the side shift to align the forks rather than trying to align the entire vehicle. Extend the boom as necessary when lifting a load, and retract the boom against the frame when transporting loads. Use oscillation to pick up loads easily at an angle.

#### TRANSPORTING A LOAD

6-3. When transporting a load, tilt the mast as far back as the load will permit and raise the load only high enough (4 to 6 inches) to clear obstructions. Always change speed gradually, as sudden starts and stops will cause the load to shift. Gradual starts and stops also prevent rapid wear of machine components. Use four-wheel steering for normal material handling and two-wheel steering for high-speed runs.

#### OPERATING IN SAND OR MUD

6-4. Lower the tire pressure when operating in sand or mud. Check the operator's manual for appropriate pressures.

## TRANSPORTING ON RAMPS AND GRADES

6-5. When using a forklift to transport cargo up ramps or other grades, carry the load on the upgrade end of the machine. When carrying cargo downgrade, back the forklift down the grade with the load on the upgrade end. Carry all loads with the tines tipped back.

#### **OPERATING IN WATER**

6-6. For operating in water, disconnect the fan and use four-wheel drive. (Check the operator's manual for servicing requirements after operating in salt water.)

## **SAFETY**

6-7. Operators must always face in the direction of travel. Carry the load so that it does not obstruct the operator's vision in the direction of travel. When forklifts are not in operation, lower the forks and rest them flat on the ground or floor.

## **OVERHEAD SAFETY GUARDS**

6-8. Equip forklifts of all types with steel overhead safety guards. Permit exceptions only when the overhead safety guards either increase the overall height of the forklift or restrict the operator's freedom of movement.

### LOAD CAPACITY

6-9. Stencil the machine's load capacity and gross weight on the machine in plain view of the operator. Never exceed this capacity. Do not counterweight the machine to increase lifting capacity. The capacity rating is based on the load positioned 24 inches from the fork's heel.

#### HOISTING PERSONNEL

6-10. Use a forklift to hoist personnel only after obtaining a supervisor's approval and under the following conditions:

- Allow only skilled personnel to perform tasks requiring elevation of personnel by forklift.
- Use special *personnel pallets* (guardrails on all four sides).
- Face all personnel away from the mast with their hands clear of the hoisting mechanism during the actual raising and lowering.